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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,158	06/15/2001	Srinivas Gutta	US010281	9402

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EXAMINER

SHELEHEDA, JAMES R

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,158

Applicant(s)

GUTTA ET AL.

Examiner

James Sheleheda

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments


1. In view of the Appeal Brief filed on 05/22/06, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

2. Applicant's arguments, see Appeal Brief, filed 05/22/06, with respect to the rejection(s) of claim(s) 1-26, under Liebenow have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of Maissel et al. (Maissel) (WO 99/01984 A1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel et al. (Maissel) (WO 99/01984 A1) in view of Lu et al (Lu) (5,031,228).

As to claim 1, Maissel discloses an apparatus useful with an entertainment system (Fig. 1), the apparatus comprising:

a persistent data store (Fig. 2; profile storage unit, 140) having a plurality of storage locations to store a plurality of user preference data for a corresponding plurality of entertainment system users (page 15, line 29-page 16, line 8 and page 18, lines 5-17), wherein individual storage locations are dedicated to store user preference data for an individual system user (page 15, line 29-page 16, line 8 and page 18, lines 5-30);

a user detection system (user PIN entry; page 18, lines 5-17); and

a profile processor, communicatively coupled to the persistent data store and the user detection system (Fig. 2; intelligent agent, 130), the profile processor programmed to:

detect which users of the plurality of entertainment system users are currently within a predetermined viewing area (identify the users who have entered their PIN; page 18, lines 5-17); and

automatically create a composite user profile (page 18, lines 5-17 and page 20, lines 19-27) useful for generating a set of recommended entertainment options from a set of available entertainment options (page 20, line 19-page 22, line 17), the composite user profile being based on the profiles of each of the plurality of users currently within the predetermined viewing range (associated with the plurality of identified viewers; page 18, lines 5-17 and page 20, lines 19-27).

While Maissel discloses a manual user detection system, he fails to specifically disclose *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area.

In an analogous art, Lu discloses a television audience measurement system (Fig. 1; column 1, lines 14-24) which will automatically identify each of a plurality of individual viewers (column 2, lines 5-16 and lines 47-60) within a predetermined viewing area (column 2, lines 9-12 and lines 47-60) for the typical benefit of passively identifying viewers and eliminating the inaccuracies and errors provided by manual systems (column 1, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include *automatically* detecting which users of the plurality of entertainment system users are currently within a

predetermined viewing area, as taught by Lu, for the typical benefit of eliminating the inaccuracies and errors provided by manual entry systems.

As to claim 2, Maissel and Lu disclose wherein the user detection system comprises a computer vision system (camera/image recognition system; see Lu at Fig. 1; column 2, lines 48-60 and column 3, lines 37-61).

As to claim 3, Maissel and Lu disclose wherein the computer vision system identifies faces in the detected imagery (see Lu at column 2, lines 36-60).

As to claim 4, Maissel and Lu disclose wherein the profile processor is further programmed to monitor interaction of users with the entertainment system (see Maissel at page 18, lines 18-30), selectively store a predetermined portion of each interaction in a view history (viewer preference profile; see Maissel at page 15, line 29-page 16, line 8 and page 18, line 18-page 19, line 8), and selectively retrieve interactions from the view history (see Maissel at page 24, lines 7-17).

As to claim 5, Maissel and Lu disclose wherein the profile processor is further programmed to:

create at least one value relating to the view history of a user within that user's profile (see Maissel at page 18, lines 18-page 19, line 8 and page 20, lines 1-11); and

create a set of recommended viewing choices (see Maissel at page 20, line 19-page 22, line 17) for the composite user profile (see Maissel at page 20, lines 19-27) based at least in part on each detected user's past viewing history for viewing choices similar to or the same as the viewing choices in those user's past viewing histories (see Maissel at page 18, line 18-page 19, line 8 and page 20, lines 1-11).

As to claim 6, Maissel discloses an entertainment system (Fig. 1) comprising:
at least one entertainment system component (receiving unit, 120) providing programming available to at least one user (television programs; page 15, lines 18-28 and page 16, lines 9-15), the programming being received via at least one input to the entertainment system component (see Figs. 1 and 2);

a persistent data store (Fig. 2; profile storage unit, 140) having a plurality of storage locations to store a plurality of user preference data for a corresponding plurality of entertainment system users (page 15, line 29-page 16, line 8 and page 18, lines 5-17), wherein at least one unique storage location is dedicated to store the user preferences data for a unique corresponding system user (page 15, line 29-page 16, line 8 and page 18, lines 5-30);

a profile processor (Fig. 2; intelligent agent, 130), operatively in communication with the at least one entertainment system component (Fig. 2), the persistent data store (Fig. 2), and a user detection system (user PIN entry; page 18, lines 5-17), the profile processor programmed to:

detect which users of the plurality of entertainment system users are currently within a predetermined viewing area (identify the users who have entered their PIN; page 18, lines 5-17); and

automatically create a composite user profile (page 18, lines 5-17 and page 20, lines 19-27) based on a profile for each of the plurality of users currently detected within the predetermined viewing area (associated with the plurality of identified viewers; page 18, lines 5-17 and page 20, lines 19-27); and

dynamically adjust operating parameters for the entertainment system in response to the composite user profile (page 20, line 19-page 22, line 17).

While Maissel discloses a manual user detection system, he fails to specifically disclose *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area, wherein the user detection system employs a computer vision system.

In an analogous art, Lu discloses a television audience measurement system (Fig. 1; column 1, lines 14-24) which will automatically identify each of a plurality of individual viewers (column 2, lines 5-16 and lines 47-60) within a predetermined viewing area (column 2, lines 9-12 and lines 47-60) utilizing a computer vision system (camera/image recognition system; see Lu at Fig. 1; column 2, lines 48-60 and column 3, lines 37-61) for the typical benefit of passively identifying viewers and eliminating the inaccuracies and errors provided by manual systems (column 1, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include *automatically* detecting

which users of the plurality of entertainment system users are currently within a predetermined viewing area, wherein the user detection system employs a computer vision system, as taught by Lu, for the typical benefit of eliminating the inaccuracies and errors provided by manual entry systems.

As to claims 7 and 25, Maissel discloses a method, and corresponding computer program embodied within a computer readable medium, for creating a composite user profile for a plurality of users (Fig. 1; page 15, line 18-page 16, line 9), the apparatus comprising:

detecting which of a plurality of users are currently within a predetermined viewing area (users near to enter PIN; page 18, lines 5-17);

determining an identity for each of the detected plurality of users (identify the users who have entered their PIN; page 18, lines 5-17);

for each identified user,

comparing the user's identify against a first predetermined portion of user data stored in a persistent data store (comparing the input data to the user; page 18, lines 5-17);

retrieving a second predetermined portion of user data from the persistent data store for each user with a user profile stored in the persistent data store (retrieving the user profiles; page 24, lines 7-17); and

creating a composite user profile (page 18, lines 5-17 and page 20, lines 19-27) from each of the second predetermined portions of user data (from the

plurality of identified viewer profiles; page 18, lines 5-17 and page 20, lines 19-27).

While Maissel discloses a manual user detection system, he fails to specifically disclose *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area.

In an analogous art, Lu discloses a television audience measurement system (Fig. 1; column 1, lines 14-24) which will automatically identify each of a plurality of individual viewers (column 2, lines 5-16 and lines 47-60) within a predetermined viewing area (column 2, lines 9-12 and lines 47-60) for the typical benefit of passively identifying viewers and eliminating the inaccuracies and errors provided by manual systems (column 1, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area, as taught by Lu, for the typical benefit of eliminating the inaccuracies and errors provided by manual entry systems.

As to claim 8, Maissel and Lu disclose creating a set of recommended entertainment options based on the composite user profile (see Maissel at page 20, line 19-page 22, line 17) from a set of available entertainment options (the current program guide; see Maissel at page 20, line 19-page 22, line 17 and page 6, line 16-page 17, line 16).

As to claim 9, Maissel and Lu disclose

accumulating a view history for each detected user, the view history comprising positive entertainment options (see Maissel at page 18, lines 18-30 and page 19, lines 1-8);

creating a composite view history from the accumulated view histories (see Maissel at page 20, lines 19-27), the composite view history comprising positive entertainment options (see Maissel at page 18, lines 18-30, page 19, lines 1-8 and page 20, lines 19-27);

adjusting the composite user profile using the positive entertainment options in the composite view history wherein each positive entertainment option in the composite user profile reflects a sum of occurrences of that positive option in each of the individual user profiles (see Maissel at page 18, lines 18-30, page 19, lines 1-8 and page 20, lines 19-27);

generating negative entertainment options for each positive entertainment option in the composite user profile (see Maissel at page 19, lines 16-30);

determining which entertainment options available in a predetermined time frame are positively rated by the composite user profile (see Maissel at page 18, lines 18-30, page 19, lines 1-8 and page 20, lines 19-27); and

generating a composite score for each positive entertainment option and negative entertainment option in the composite user profile (see Maissel at page 18, lines 18-30, page 19, lines 1-8 and page 20, lines 19-27).

As to claim 11, Maissel and Lu disclose
creating a composite view history to reflect each view history stored in the stored user data for each user identified (see Maissel at page 20, lines 19-27),
generating a set of positive entertainment options from a set of available entertainment options for that available entertainment options that meet or exceed a predetermined threshold value of positive entertainment options in the composite view history (see Maissel at page 18, lines 18-30, page 19, lines 1-8, page 20, line 19-page 22, line 17);
generating a set of negative entertainment options by sampling the set of available entertainment options that do not meet the predetermined threshold value of positive entertainment options in the composite view history (see Maissel at page 19, lines 16-30).

As to claim 12, Maissel and Lu disclose using a uniform random distribution to create a set of negative options (uniform distribution between the individual profiles; see Maissel at page 20, lines 19-27).

As to claim 13, Maissel and Lu disclose
allowing a user to select an entertainment option from the set of positive entertainment options (see Maissel at page 16, lines 9-15); and

preventing selection of an available entertainment option for entertainment options that are members of the set of negative entertainment options (see Maissel at page 21, line 24-page 22, line 17).

As to claim 14, Maissel and Lu disclose restricting negative entertainment options to those that occur within a predetermined time frame (see Maissel at page 22, lines 1-3).

As to claim 15, Maissel and Lu disclose using an adaptive sampling technique to select entertainment options from all available entertainment options such that the selected entertainment options match preferences in the composite user profile within a predetermined range (see Maissel at page 22, lines 7-12).

As to claim 16, Maissel and Lu disclose generating entertainment option recommendations based on available entertainment options and the set of positive entertainment options using implicit selection techniques (based on user histories; see Maissel at page 20, lines 1-27) or explicit techniques (see Maissel at page 19, lines 9-30).

As to claim 17, Maissel and Lu disclose wherein the implicit selection techniques comprise capturing users' entertainment option selection patterns (see Maissel at page 18, line 18-page 19, line 8) and generating entertainment option recommendations (see

Maissel at page 20, line 19-page 22, line 17) based on a composite of the users' entertainment option selection patterns (see Maissel at page 20, lines 19-27).

As to claim 18, Maissel and Lu disclose wherein the explicit selection techniques comprise having the users explicitly input each of the user's entertainment option preferences (see Maissel at page 19, lines 9-30) and generating entertainment option recommendations (see Maissel at page 20, line 19-page 22, line 17) based on a composite of the users' explicit entertainment option preferences (see Maissel at page 20, lines 19-27).

As to claim 19, Maissel and Lu disclose capturing users' entertainment option selection patterns (see Maissel at page 18, line 18-page 19, line 8);

accepting at least one of the users' explicit input of the user's entertainment option preferences (see Maissel at page 19, lines 9-30); and

generating entertainment option recommendations based on a composite of the users' entertainment option selection patterns and on a composite of the users' explicit entertainment option preferences (see Maissel at page 20, lines 19-27).

As to claim 20, Maissel and Lu disclose generating scores for each of the detected users from each of the detected users' profile data (see Maissel at page 18, line 17-page 19, line 8);

combining the detected users' profiles using the generated scores (see Maissel at page 20, lines 19-27).

As to claim 21, Maissel and Lu disclose wherein each user's individual profile may further comprise a weighting factor such that each detected user's preferences are weighted independently from other users detected in the viewing area when generating scores for the detected users from each of the detected users' profile data (see Maissel at page 20, lines 19-27).

As to claim 22, while Maissel and Lu disclose wherein the weighting can vary by any appropriate method (see Maissel at column 20, lines 23-27), they fail to specifically disclose wherein the weighting varies by calendar time.

The examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant to vary the weighting of preferences based upon calendar time, such as by seasons of the year, for the typical benefit of allowing date specific content to be more heavily weighted at the appropriate time, such as for programming including seasonal activities.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel and Lu to include wherein the weighting varies by calendar time for the typical benefit of allowing date specific content to be more heavily weighted at the appropriate time, such as for programming including seasonal activities.

As to claim 23, Maissel and Lu disclose rating available entertainment options for a predetermined time frame (the current program listings; see Maissel at page 16, line 16-page 17, line 16) against each of the previously created individual profiles of each user detected in the viewing area (see Maissel at page 20, line 19-27); and presenting only entertainment options that meet or exceed a predetermined rating threshold in each of the previously created individual profiles of each user present in the viewing area (see Maissel at page 20, line 19-page 22, line 17).

As to claim 24, Maissel in an entertainment system (Fig. 1) including a program processor (Fig. 2; intelligent agent, 130), operatively connected to a persistent data store (Fig. 2; profile storage unit, 140), a program output device (television; see Fig. 1), an audio input device (receiving unit, 120), a user detection system (user PIN entry; page 18, lines 5-17) and a video input device (receiving unit, 120), a method, and corresponding computer program embodied within a computer readable medium, for automatically configuring the entertainment system for a plurality of identified system users (Fig. 1; page 15, line 18-page 16, line 9), the method comprising:

detecting which of a plurality of users are currently within a predetermined viewing area (users near to enter PIN; page 18, lines 5-17);

determining which of the detected users have user preference data stored in the persistent data store (identify the users who have entered their PIN; page 18, lines 5-17);

retrieving the user preference data corresponding to each of the detected users from the persistent data store for those detected users having profiles in the persistent data store (retrieving the user profiles; page 24, lines 7-17); and

creating a composite user profile (page 18, lines 5-17 and page 20, lines 19-27) using the retrieved user preference data (from the plurality of identified viewer profiles; page 18, lines 5-17 and page 20, lines 19-27)

scanning programming information for available entertainment options which match the composite user profile within a predetermined range of matching values (page 20, line 19-page 22, line 17); and

adjusting the entertainment system in accordance with the composite user profile and available entertainment options (page 20, line 19-page 22, line 17).

While Maissel discloses a manual user detection system, he fails to specifically disclose *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area, wherein the automatically detecting employs a computer vision system.

In an analogous art, Lu discloses a television audience measurement system (Fig. 1; column 1, lines 14-24) which will automatically identify each of a plurality of individual viewers (column 2, lines 5-16 and lines 47-60) within a predetermined viewing area (column 2, lines 9-12 and lines 47-60) utilizing a computer vision system

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(camera/image recognition system; see Lu at Fig. 1; column 2, lines 48-60 and column 3, lines 37-61) for the typical benefit of passively identifying viewers and eliminating the inaccuracies and errors provided by manual systems (column 1, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include *automatically* detecting which users of the plurality of entertainment system users are currently within a predetermined viewing area, wherein the automatically detecting employs a computer vision system, as taught by Lu, for the typical benefit of eliminating the inaccuracies and errors provided by manual entry systems.

Conclusion

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

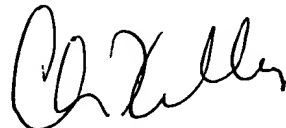
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda
Patent Examiner
Art Unit 2623

JS



CHRIS KELLEY
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